



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/759,062 | 01/20/2004 | Chih-Ming Chen | FP9969 | 6691 |
| 52981 | 7590 | 11/03/2006 | EXAMINER | |
| LEONG C LEI PMB # 1008 1867 YGNACIO VALLEY ROAD WALNUT CREEK, CA 94598 | | | SNIDER, THERESA T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1744 | |

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/759,062 | CHEN, CHIH-MING |
| | Examiner | Art Unit |
| | Theresa T. Snider | 1744 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 January 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because:
reference character “41” has been used to designate both ejector(page 7, line 13) and ejection head(page 7, line 16);
reference character “2” has been used to designate both vacuum box(page 6, line 10) and collection box(page 6, line 20).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
Exemplary of such:
Page 1, line 19, ‘for’ should be replaced with ‘from.’
Page 2, lines 2-3, it is unclear as to what is meant by ‘As for...cleaner.’;
Line 3, ‘rotates’ should be replaced with ‘rotate’;

Line 3, it is unclear as to what is meant by ‘air is sucked in from the air’.

Page 6, line 15, ‘a’ should be inserted after ‘is’;

Line 16(and occurrences thereafter), the use of ‘hollow cylindrical body’ is confusing. A cylinder is typically a tube without end walls. The ‘hollow cylindrical body’ of the invention, however, has endwalls. It would be very helpful if Applicant defined the endwalls in the specification and claims and provided them with reference numerals in the specification and drawings. This would clarify/better define the placement of the connection head and the blocking plate;

Line 17, it is unclear as to what is meant by ‘protruded out’.

Page 7, line 2. ‘wit ha’ should be replaced with ‘with a’;

Line 7, it is unclear as to what is meant by ‘soft’;

Line 7, ‘effective’ should be replaced with ‘effectively’;

Lines 8, ‘to discharge’ should be replaced with ‘from discharging’;

Line 10, ‘a’ should be replaced with ‘the’;

Line 11, it is unclear as to what is meant by a suction ‘shaft’; is it a nozzle?

Line 11, it is unclear as to what is meant by ‘for vacuum’;

Line 12, ‘an’ should be replaced with ‘the’;

Line 13, it is unclear as to what is meant by ‘narrow’;

Line 17, it is unclear as to what is meant by ‘it is a high efficient air suction’;

Line 19, ‘an’ should be deleted;

Line 19, ‘practise’ should be replaced with ‘practice’.

Appropriate correction is required.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the vacuum and ejection tubes being hollow flexible tubes(claim 2) and the vacuum tube and the ejection tubes being screwed or engaged to the head(claim 3).

Claim Objections

4. Claims 1-3 are objected to because of the following informalities: claim 1, line 7, 'of a' should be inserted after 'halves'. Claim 2, line 2, 'tube' should be replaced with 'tubes'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 1, line 2, 'improved structure of an' should be deleted;

Lines 2-4, it is unclear as to whether this is the preamble or the body of the claim;

Line 4, 'characterized in that' should be replaced with a phrase commonly used in US practice;

Line 12, it is unclear as to what is meant by a 'concentric' connection head;

Line 12, it is unclear as to whether ‘a concentric connection head’ is in addition the ‘a connection head’ of line 10 or one in the same;

Line 15, ‘inlet’ should be inserted after ‘air’ to correspond with lines 17 and 18;

Line 15, it is unclear as to what is meant by ‘hole mounted with a soft blocking plate’;

Line 15, it is unclear as to what constitutes ‘soft’;

Line 16, ‘the collected’ should be replaced with ‘any’;

Line 19, it is unclear as to what is meant by a suction ‘shaft’;

Lines 19-20, ‘the air supply connecting head’ lacks proper antecedent basis;

Line 20, it is unclear as to what constitutes ‘narrow’.

Allowable Subject Matter

7. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses a vacuum cleaner having an air supply pump with an air supply head connected to an air ejection tube and an air inlet head, a dust vacuum box and a vacuum tube. HOWEVER fails to disclose or fairly suggest the vacuum box formed of two cylindrical halves wherein one of the halves has an extended outer edge with the center section connected to a

connection head which is in turn connected to the air inlet head and a bottom section engageable with a filter seat having a filter mounted thereon and the second half having an air inlet hole with a blocking plate connected to the vacuum tube.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP06-098837 discloses a vacuum cleaner having an air supply port and an air inlet port. Miller discloses a vacuum cleaner having an air supply head, an air inlet head and a blocking plate. JP2000-14608 discloses a vacuum cleaner having an air supply port, an air inlet port, a vacuum tube and an air ejection tube.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Theresa T. Snider
Primary Examiner
Art Unit 1744

10/24/06